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[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2124

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9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)
	09/599,812	MURRAY ET AL.
	Examiner Qamrun Nahar	Art Unit 2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 May 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-42 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. This action is in response to the amendment filed on 5/29/03.
2. The objection to the specification is withdrawn in view of applicant's amendment.
3. The objections to claims 23, 30, 31 and 37 are withdrawn in view of applicant's amendment.
4. The rejections under 35 U.S.C. 101 to claims 1-7, 9-10, 12-16 and 18-24 are withdrawn in view of applicant's amendment.
5. Claims 1, 9, 12, 18, 23, 30, 31 and 37 have been amended.
6. Claims 1-42 are pending.
7. Claims 1, 8-9, 11, 18, 25, 40, and 42 stand finally rejected under 35 U.S.C. 102(b) as being anticipated by Smale (U.S. 5,764,985).
8. Claims 2-7, 10, 12-17, 19-24, 26-39, and 41 stand finally rejected under 35 U.S.C. 103(a) as being unpatentable over Smale (U.S. 5,764,985) in view of Cheng (U.S. 6,421,656).

Response to Amendment

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 8-9, 11, 18, 25, 40, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Smale (U.S. 5,764,985).

Per Claim 1 (Amended):

The Smale patent discloses:

- a software architecture embodied on a computer-readable medium, the architecture comprising: multiple attachment points collectively arranged to filter data associated with files that describe software extensions (“a method and system that coordinates software extensions ... One or more extensions register with the central manager, the extensions being capable of providing extended functionality to one or more lower level functions ... As calls are made from an application program to a lower level function” in abstract; column 2, lines 39-42; column 3, lines 1-10; column 7, lines 23-35; and Fig. 5; for example, Fig. 5, items 60, 61 and 62 illustrates the multiple attachment points collectively arranged to filter data associated with files that describe software extensions; that is, arrays 60-62 are interpreted as multiple attachment points)

- multiple extension managers associated with the multiple attachment points and with respective feature types that can be added to a software platform by software extensions, the extension managers being configured to receive data from the multiple attachment points that pertains only to the feature type with which the extension manager is associated (“One or more extensions register with the central manager, the extensions being capable of providing extended functionality to one or more lower level functions ... As calls are made from an application program to a lower level function, the calls are intercepted at the central manager.

Each of the appropriately registered extensions is then notified of the existence of the call, thereby allowing the extensions to provide extended functionality thereto ... the call is passed by the manager to the low level function, which returns a result of the call to the manager. The extensions are then notified of the result of the call. This enables the registered extensions to modify the result of the call, for example to retry the call. ... As a result, the notification manager 32 has access to registered entries for all valid operation types that can be extended. The master list 50 comprises, for example, multiple data structures 52-54 which contain information about the registered extensions indexed by the operation type (NotifyType) passed thereto, such as NotifyAddConnection or NotifyCancelConnection. By way of example, as best shown in Fig. 5 the data structure 52 contains information relating to all extensions of the type registered for notification when requests to add connections are received, as identified by the type information stored in a first field 56 therein." in abstract; column 3, lines 1-15; and column 7, lines 16-27; multiple data structures 52-54 are interpreted as multiple extension managers, which are associated with the multiple attachment points and with respective feature types).

Per Claim 8:

The Smale patent discloses:

- a computer embodying the software architecture of claim 1 (column 3, lines 20-23 and Fig. 1).

Per Claim 9 (Amended):

The Smale patent discloses:

- a software architecture embodied on a computer-readable medium, the architecture comprising: a hub structure configured to receive multiple different files that describe software extensions that can be added to a software platform ("a method and system that coordinates software extensions ... One or more extensions register with the central manager, the extensions being capable of providing extended functionality to one or more lower level functions ... As calls are made from an application program to a lower level function, the calls are intercepted at the central manager. Each of the appropriately registered extensions is then notified of the existence of the call, thereby allowing the extensions to provide extended functionality thereto ... the call is passed by the manager to the low level function, which returns a result of the call to the manager. The extensions are then notified of the result of the call. This enables the registered extensions to modify the result of the call, for example to retry the call. ... The master list 50 comprises, for example, multiple data structures 52-54 which contain information about the registered extensions indexed by the operation type (NotifyType) passed thereto, such as NotifyAddConnection or NotifyCancelConnection." in abstract; column 2, lines 39-42; column 3, lines 1-15; Fig. 3; column 7, lines 16-35; and Fig. 5; the master list 50 is interpreted as a hub structure; as the extensions are registered, the master list 50 receives requests to add the connections for the extensions; it is inherent that the extensions are contained in a file)

- combine the multiple different files into a single exposable list; and expose the single exposable list to a filter structure that is configured to filter the list ("the data structure 52

contains information relating to all extensions of the type registered for notification when requests to add connections are received ... a field 58 contains a pointer identifying the location of an array 60 (or a list or table) wherein the addresses of the extensions registered for this type of request are located. As shown in FIGS. 4 and 5, other types of registered extensions have similar data structures 53, 54, within the master entry list 50. As with data structure 52, each structure 53, 54 is indexed by its type, contains a counter for the registered extension entries for that type, and includes a field containing a pointer to its corresponding address array, 61, 62, respectively." in column 3, lines 38-40; column 7, lines 24-43; and Figs. 4 and 5; the master list 50 adds connections for the multiple different files into a single exposable list, and exposes the single exposable list to the notification manager that is configured to filter the list; that is, the notification manager is interpreted as a filter structure).

Per Claim 11:

The Smale patent discloses:

- a computer embodying the software architecture of claim 9 (column 3, lines 20-23 and Fig. 1).

Per Claim 18 (Amended):

This is an another version of the claimed software architecture discussed above, claim 9, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also anticipated by Smale.

Per Claim 25:

The Smale patent discloses:

- **a computer embodying the software architecture of claim 18** (column 3, lines 20-23 and Fig. 1).

Per Claim 40:

This is a method version of the claimed software architecture discussed above, claim 18, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above, including “receives multiple different files, each of which being associated with a different software extension and logically describing its associated software extension” (column 7, lines 16-27). Thus, accordingly, this claim is also anticipated by Smale.

Per Claim 42:

The Smale patent discloses:

- **one or more computer-readable media having computer-readable instructions thereon which, when executed by a computer, cause the computer to implement the method of claim 40** (column 3, lines 20-23 and Fig. 1).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2-7, 10, 12-17, 19-24, 26-39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smale (U.S. 5,764,985) in view of Cheng (U.S. 6,421,656).

Per Claim 2:

The rejection of claim 1 is incorporated, and further, Smale does not explicitly teach that the attachment points are defined as predicate chains. Cheng teaches that the attachment points are defined as predicate chains (column 3, lines 48-51).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the software architecture disclosed by Smale to include that the attachment points are defined as predicate chains using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide proper order of execution of the extended functionality.

Per Claim 3:

The rejection of claim 1 is incorporated, and further, Smale does not explicitly teach that the attachment points filter XML data. Cheng teaches that the attachment points filter XML data (column 3, lines 48-51).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the software architecture disclosed by Smale to include that the attachment points filter XML data using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions using an extensible programming language.

Per Claim 4:

The rejection of claim 3 is incorporated, and Cheng further teaches that each feature type is associated with an XML tag (column 15, lines 31-51).

Per Claim 5:

The rejection of claim 3 is incorporated, and Cheng further teaches that each feature type is associated with an XML tag, at least some of the feature types comprising user-defined feature types (column 2, lines 2-5 and column 15, lines 31-51).

Per Claim 6:

The rejection of claim 1 is incorporated, and further, Smale does not explicitly teach that each attachment point exposes collections of ordered nodes. Cheng teaches that each attachment point exposes collections of ordered nodes (column 15, lines 31-56).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the software architecture disclosed by Smale to include that each attachment point exposes collections of ordered nodes using the teaching of Cheng. The

modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions to World Wide Web documents.

Per Claim 7:

The rejection of claim 1 is incorporated, and further, Smale does not explicitly teach that each attachment point exposes collections of ordered XML nodes. Cheng teaches that each attachment point exposes collections of ordered XML nodes (column 15, lines 31-56).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the software architecture disclosed by Smale to include that each attachment point exposes collections of ordered XML nodes using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions to World Wide Web documents.

Per Claim 10:

The rejection of claim 9 is incorporated, and Smale further teaches that the hub structure receives multiple different files and exposes a list (column 3, lines 1-15 and lines 38-40; column 7, lines 24-43; and Figs. 3, 4, and 5). Smale does not explicitly teach XML files or exposing a list of XML nodes. Cheng teaches XML files and exposing a list of XML nodes (column 15, lines 31-56).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the software architecture disclosed by Smale to include XML files and expose a list of XML nodes using the teaching of Cheng. The modification would be

obvious because one of ordinary skill in the art would be motivated to provide extensions using an extensible programming language and to provide extensions to World Wide Web documents.

Per Claim 12 (Amended):

Smale teaches a software architecture embodied on a computer-readable medium, the architecture comprising multiple different attachment points each of which is configured to receive data that pertains to one or more software extensions that can be added to a software platform (“a method and system that coordinates software extensions ... One or more extensions register with the central manager, the extensions being capable of providing extended functionality to one or more lower level functions ... As calls are made from an application program to a lower level function, the calls are intercepted at the central manager. Each of the appropriately registered extensions is then notified of the existence of the call, thereby allowing the extensions to provide extended functionality thereto ... the call is passed by the manager to the low level function, which returns a result of the call to the manager. The extensions are then notified of the result of the call. This enables the registered extensions to modify the result of the call, for example to retry the call.” in abstract; column 2, lines 39-42; column 3, lines 1-15; and Fig. 3), process the data to provide a list, and expose the list (“the data structure 52 contains information relating to all extensions of the type registered for notification when requests to add connections are received ... a field 58 contains a pointer identifying the location of an array 60 (or a list or table) wherein the addresses of the extensions registered for this type of request are located. As shown in FIGS. 4 and 5, other types of registered extensions have similar data structures 53, 54, within the master entry list 50. As with data structure 52, each structure 53, 54

is indexed by its type, contains a counter for the registered extension entries for that type, and includes a field containing a pointer to its corresponding address array, 61, 62, respectively.” in column 3, lines 38-40; column 7, lines 24-43; and Figs. 4 and 5). Smale does not explicitly teach XML data, providing a list of XML nodes, or exposing the list of XML nodes. Cheng teaches XML data, providing a list of XML nodes, and exposing the list of XML nodes (“The XML document presented above has its document structure tree illustrated in Fig. 8 … the nodes have been shown in Fig. 8.” in column 15, lines 31-56).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the software architecture disclosed by Smale to include XML data, provide a list of XML nodes, and expose the list of XML nodes using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions using an extensible programming language and to provide extensions to World Wide Web documents.

Per Claims 13-16:

These are another versions of the claimed software architecture discussed above (claims 9 and 10), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also obvious.

Per Claim 17:

The rejection of claim 12 is incorporated, and Smale further teaches a computer embodying the software architecture of claim 12 (column 3, lines 20-23 and Fig. 1).

Per Claim 19:

This is an another version of the claimed software architecture discussed above, claim 10, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also obvious.

Per Claim 20:

The rejection of claim 19 is incorporated, and Cheng further teaches that the list contains root node tags for all of the XML files (column 15, lines 31-56).

Per Claim 21:

The rejection of claim 19 is incorporated, and Smale further teaches that the files logically describe where a particular extension fits on the software platform (column 3, lines 38-40; column 7, lines 24-43; and Figs. 4 and 5). Smale does not explicitly teach XML files. Cheng teaches XML files (column 15, lines 31-56).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the software architecture disclosed by Smale to include XML files using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions using an extensible programming language.

Per Claim 22:

The rejection of claim 19 is incorporated, and further, Smale does not explicitly teach that the attachment points are defined as predicate chains. Cheng teaches that the attachment points are defined as predicate chains (column 3, lines 48-51).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the software architecture disclosed by Smale to include that the attachment points are defined as predicate chains using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide proper order of execution of the extended functionality.

Per Claim 23 (Amended):

The rejection of claim 19 is incorporated, and Smale further teaches an extension manager is notified whenever an extension comprising a feature type with which it is associated is added or removed from the software platform (column 3, lines 1-15).

Per Claim 24:

The rejection of claim 19 is incorporated, and Cheng further teaches that each feature type is associated with a particular XML tag (column 15, lines 31-51).

Per Claim 26:

This is a method version of the claimed software architecture discussed above, claim 12, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Furthermore, the combination of Smale and Cheng teaches notifying an extension

manager that is associated with at least one feature type if a node that corresponds to that feature type is identified in the XML list (Smale, column 7, lines 23-27 and Cheng, column 15, lines 31-56; Cheng is relied upon for the claimed limitation reciting “the XML list”). It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by Smale to include XML list using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions using an extensible programming language and to provide extensions to World Wide Web documents.

Thus, accordingly, this claim is also obvious.

Per Claim 27:

The rejection of claim 26 is incorporated, and further, Smale does not explicitly teach that the multiple attachment points are defined as predicate chains. Cheng teaches that the multiple attachment points are defined as predicate chains (column 3, lines 48-51).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by Smale to include that the multiple attachment points are defined as predicate chains using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide proper order of execution of the extended functionality.

Per Claim 28:

The rejection of claim 27 is incorporated, and Cheng further teaches that the individual attachment points receive XML data as an input and expose a list of XML nodes (column 15, lines 31-56).

Per Claim 29:

The rejection of claim 26 is incorporated, and Cheng further teaches that the processing is accomplished by filtering on specific nodes (column 15, lines 31-56).

Per Claim 30 (Amended):

The rejection of claim 26 is incorporated, and Cheng further teaches that the processing is accomplished by exposing various nodes (column 15, lines 31-56).

Per Claim 31 (Amended):

The rejection of claim 26 is incorporated, and Cheng further teaches that the processing is accomplished by filtering on specific nodes and exposing various nodes (column 15, lines 31-56).

Per Claim 32:

The rejection of claim 26 is incorporated, and Smale further teaches one or more computer-readable media having computer-readable instructions thereon which, when executed by a computer, cause the computer to implement the method of claim 26 (column 3, lines 20-23 and Fig. 1).

Per Claims 33-35:

These are method versions of the claimed software architecture discussed above (claims 18 and 19), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above, including “receiving XML data that pertains to a software extension that is to be added to a software platform” (Smale, column 7, lines 16-27 and Cheng, column 15, lines 31-56; Cheng is relied upon for the claimed limitation reciting “XML data”). Thus, accordingly, these claims are also obvious.

Per Claim 36:

This is a method version of the claimed software architecture discussed above, claim 22, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also obvious.

Per Claim 37 (Amended):

This is a method version of the claimed software architecture discussed above, claim 19, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also obvious.

Per Claim 38:

This is a method version of the claimed software architecture discussed above (claims 18 and 19), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also obvious.

Per Claim 39:

The rejection of claim 33 is incorporated, and Smale further teaches one or more computer-readable media having computer-readable instructions thereon which, when executed by a computer, cause the computer to implement the method of claim 33 (column 3, lines 20-23 and Fig. 1).

Per Claim 41:

This is a method version of the claimed software architecture discussed above, claim 19, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also obvious.

Response to Arguments

13. Applicant's arguments with respect to claims 1-42 have been fully considered but they are not persuasive.

In the remarks, the applicant argues that:

- a) Nowhere does Smale disclose or suggest multiple attachment points collectively arranged to filter data associated with files that describe software extensions. Further, nowhere does Smale disclose or suggest multiple extension managers associated with the multiple attachment points

and with respective feature types that can be added to a software platform by software extensions.

Accordingly, for each of these individual reasons, claim 1 is not anticipated by Smale and is hence allowable.

Examiner's response:

a) Examiner strongly disagrees with applicant's assertion that Smale fails to disclose the claimed limitations recited in claim 1. Smale clearly shows each and every limitation in claim 1. As previously pointed in Paper no. 5, Smale teaches multiple attachment points collectively arranged to filter data associated with files that describe software extensions (column 7, lines 23-35 and Fig. 5; for example, Fig. 5, items 60, 61 and 62 illustrates this claimed feature; that is, arrays 60-62 are interpreted as multiple attachment points). Furthermore, Smale teaches multiple extension managers associated with the multiple attachment points and with respective feature types that can be added to a software platform by software extensions (column 7, lines 16-27; multiple data structures 52-54 are interpreted as multiple extension managers, which are associated with the multiple attachment points and with respective feature types). In addition, see the rejection above in paragraph 10 for rejection to claim 1.

In the remarks, the applicant argues that:

b) Claims 2-8 depend from claim 1 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 1, are neither disclosed nor suggested in the references of record, either

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singly or in combination with one another. In addition, given the allowability of these claims, the Office's reliance on Cheng adds nothing of significance. Further, the Office has failed to make out a *prima facie* case of obviousness for at least the reasons that the Office's stated motivation for combining Smale and Cheng is conclusory, is based on hindsight reconstruction, and is not stated with particularity, as it must be.

Examiner's response:

b) Examiner strongly disagrees with applicant's assertion that Smale fails to disclose the claimed limitations recited in claims 2-8. Smale clearly shows each and every limitation in claims 2-8. Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In the remarks, the applicant argues that:

c) Claim 9 recites a software architecture embodied on a computer-readable medium comprising:

- a hub structure configured to:

- o receive multiple different files that describe software extensions that can be added to a software platform;
- o combine the multiple different files into a single exposable list; and
- o expose the single exposable list to a filter structure that is configured to filter the list.

In making out the rejection of this claim, the Office cites to Smale's column 2, lines 39-42, column 3, lines 1-15 and Fig. 3, as apparently disclosing a hub structure configured to receive multiple different files that describe extensions that can be added to a software platform. Applicant respectfully disagrees. The excerpt cited by the Office describes Smale's system which simply includes a central manager that intercepts calls from an application program and re-directs to the calls to individual extensions in a pre-notification and post-notification process. This in no way discloses or suggests a hub structure configured to receive multiple different files that describe software extensions that can be added to a software platform. Accordingly, for at least this reason, this claim is allowable.

Examiner's response:

- c) Examiner strongly disagrees with applicant's assertion that Smale fails to disclose the claimed limitations recited in claim 9. Smale clearly shows each and every limitation in claim 9. As previously pointed in Paper no. 5, Smale teaches a hub structure configured to receive multiple different files that describe software extensions that can be added to a software platform (column 7, lines 16-35; and Fig. 5; the master list 50 is interpreted as a hub structure; as the

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extensions are registered, the master list 50 receives requests to add the connections for the extensions; it is inherent that the extensions are contained in a file). In addition, see the rejection above in paragraph 10 for rejection to claim 9.

In the remarks, the applicant argues that:

- d) Further, the Office cites to Smale's column 3, lines 38-40, column 7, lines 24-43 and Figs. 4 and 5, as apparently disclosing a hub structure that combines the multiple different files into a single exposable list, and exposes the single exposable list to a filter structure that is configured to filter the list. Applicant respectfully disagrees.

The excerpt cited by the Office simply discloses a data structure that is utilized by Smale to contain information relating to extensions that request notification when a particular type of call is received by the central manager. Thus, the data structure is simply one which is used to organize and re-direct calls to the various extensions that are registered in Smale's system. This in no way discloses or suggests a hub structure that combines the multiple different files into a single exposable list, and exposes the single exposable list to a filter structure that is configured to filter the list. Accordingly, for at least this additional reason, this claim is allowable.

Examiner's response:

- d) Examiner strongly disagrees with applicant's assertion that Smale fails to disclose the claimed limitations recited in claim 9. Smale clearly shows each and every limitation in claim 9. As previously pointed in Paper no. 5, Smale teaches a hub structure that combines the multiple different files into a single exposable list, and exposes the single exposable list to a filter

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structure that is configured to filter the list (column 7, lines 24-43; and Figs. 4 and 5; the master list 50 adds connections for the multiple different files into a single exposable list, and exposes the single exposable list to the notification manager that is configured to filter the list; that is, the notification manager is interpreted as a filter structure). In addition, see the rejection above in paragraph 10 for rejection to claim 9.

In the remarks, the applicant argues that:

e) Claims 10-11 depend from claim 9 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 9, are neither disclosed nor suggested in the references of record, either singly or in combination with one another. In addition, given the allowability of claim 9, the Office's reliance on Cheng to reject claim 10 does not add anything of significance. Further, the Office has failed to make out a *prima facie* case of obviousness for at least the reasons that the Office's stated motivation for combining Smale and Cheng is conclusory, is based on hindsight reconstruction, and is not stated with particularity, as it must be.

Examiner's response:

e) Examiner strongly disagrees with applicant's assertion that Smale fails to disclose the claimed limitations recited in claims 10-11. Smale clearly shows each and every limitation in claims 10-11. Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight

reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In the remarks, the applicant argues that:

- f) Claim 12 recites a software architecture embodied on a computer-readable medium, the architecture comprising multiple different attachment points each of which is configured to:
- receive XML data that pertains to one or more software extensions that can be added to a software platform;
 - process the XML data to provide a list of XML nodes; and
 - expose the list of XML nodes.

In making out the rejection of this claim, the Office argues that Smale teaches a software architecture comprising multiple attachment points each of which is configured to receive data as recited in this claim. Applicant disagrees. First, Smale does not teach or suggest attachments points as that term is contemplated in Applicant's disclosure.

Further, this claim recites that each of the attachment points is configured to, *inter alia*, receive XML data that pertains to one or more software extensions that can be added to a software platform. As Smale's extensions are already registered in the system, Smale in no way teaches an architecture in which individual attachment points are configured to receive any such data that pertains to one or more software extensions that can be added to a software platform. In

as much as Smale is missing this feature completely, it is virtually impossible for Smale to disclose the features that follow in the claim and which depend on this first feature.

Examiner's response:

f) Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claim 12. The combination of Smale and Cheng clearly shows each and every limitation in claim 12. The Examiner has already addressed the applicant's arguments regarding attachment points in the Examiner's Response (a) above. Furthermore, in order for the extensions to be registered in the system, it is necessary for the extensions to be received into the system.

In the remarks, the applicant argues that:

g) The Office further admits that Smale does not teach XML data, providing a list of XML nodes, and exposing a list of XML nodes. Applicant agrees. The Office then relies on Cheng's XML disclosure and argues that it would be obvious to combine the teachings of both of these references to render the subject matter of this claim obvious. As a stated motivation for making the combination, the Office argues that "[t]he modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions using an extensible programming language and to provide extensions to World Wide Web documents."

The Office has failed to make out a *prima facie* case of obviousness for a number of different reasons. First, as noted above, all of the features recited in this claim are not disclosed or taught in the cited references. These absences cannot be provided by assuming that a reference

discloses that which it does not. Second, the Office's stated motivation for making the combination is, at best, conclusory and based on hindsight reconstruction that is not supported with the particularity that the Federal Circuit says it must be. The Office's stated motivation is equivalent to saying "It would be obvious to create this invention because it would be obvious to create this invention." Accordingly, for at least these additional reasons, this claim is allowable.

Examiner's response:

g) Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claim 12. The combination of Smale and Cheng clearly shows each and every limitation in claim 12. The Examiner has already addressed the applicant's arguments regarding receiving data in the Examiner's Response (f) above. Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In the remarks, the applicant argues that:

h) Claims 13-17 depend from claim 12 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination

with those recited in claim 12, are neither disclosed nor suggested in the references of record, either singly or in combination with one another.

Examiner's response:

h) Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claims 13-17. The combination of Smale and Cheng clearly shows each and every limitation in claims 13-17.

In the remarks, the applicant argues that:

- i) Claim 18 recites a software architecture embodied on a computer-readable medium, the architecture comprising:
- a hub structure configured to:
 - receive multiple different files that describe software extensions that can be added to a software platform;
 - combine the multiple different files into a single exposable list; and
 - expose the single exposable list to a filter structure that is configured to filter the list;
 - a filter structure comprising multiple attachment points collectively arranged to filter data associated with the list exposed by the hub structure; and
 - multiple extension managers associated with the multiple attachment points and with respective feature types that can be added to a software platform by software extensions, the extension managers being configured to receive data from the multiple attachment

points that pertains only to the feature type with which the extension manager is associated.

This claim recites features which appear in claim 9's recited hub structure. Thus, for all of the reasons set forth with respect to the allowability of claim 9, this claim is allowable. In addition, this claim recites features (i.e. a filter structure, and multiple extension managers) which, in combination with the recited hub structure, are simply not disclosed in Smale.

Examiner's response:

i) Examiner strongly disagrees with applicant's assertion that Smale fails to disclose the claimed limitations recited in claim 18. Smale clearly shows each and every limitation in claim 18. The Examiner has already addressed the applicant's arguments regarding claim 9 in the Examiner's Responses (c) and (d) above. In addition, the Examiner has already addressed the applicant's arguments regarding a filter structure in the Examiner's Responses (c) and (d) above and regarding multiple extension managers in the Examiner's Response (a) above.

In the remarks, the applicant argues that:

j) Claims 19-25 depend from claim 18 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 18, are neither disclosed nor suggested in the references of record, either singly or in combination with one another. Given the allowability of claim 18, the Office's reliance on Cheng to reject claims 19-24 is not seen to add anything of significance. Further, the

Office has failed to make out a *prima facie* case of obviousness for at least the reasons that the Office's stated motivation for combining Smale and Cheng is conclusory, is based on hindsight reconstruction, and is not stated with particularity, as it must be.

Examiner's response:

j) Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claims 19-24 or that Smale fails to disclose the claimed limitations recited in claim 25. The combination of Smale and Cheng clearly shows each and every limitation in claims 19-24. Smale clearly shows each and every limitation in claim 25. Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In the remarks, the applicant argues that:

k) Claim 26 recites a method of providing a software extension comprising:

- exposing an XML list that contains one or more nodes;

- processing the XML list to identify specific nodes that correspond to various feature types that can be added to a software platform; and
- notifying an extension manager that is associated with at least one feature type if a node that corresponds to that feature type is identified in the XML list.

In making out the rejection of this claim, the Office argues that this claim is simply a method version of the software architecture of claim 12. As such, the Office rejects this claim for the same reasons as claim 12. Applicant disagrees with the Office and submits that this claim is not simply a method version of claim 12. Specifically, this claim recites features which are different from those recited in claim 12. For example, this claim recites "notifying an extension manager that is associated with at least one feature type if a node that corresponds to that feature type is identified in the XML list." Claim 12 contains no such subject matter. Applicant submits that this claim has not been examined by the Office because the cited art has not been applied to this claim.

Assuming, however, that the Office had specifically applied the art to this claim, it is evident, in light of the discussion above, that neither Smale nor Cheng, individually or in combination with one another, disclose or suggest the subject matter of this claim. Accordingly, for at least this reason, this claim is allowable.

Examiner's response:

- k) Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claim 26. The combination of Smale

and Cheng clearly shows each and every limitation in claim 26. The combination of Smale and Cheng teaches notifying an extension manager that is associated with at least one feature type if a node that corresponds to that feature type is identified in the XML list (Smale, column 7, lines 23-27 and Cheng, column 15, lines 31-56; Cheng is relied upon for the claimed limitation reciting “the XML list”).

As previously pointed out in Paper no. 5, it would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by Smale to include XML list using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions using an extensible programming language and to provide extensions to World Wide Web documents. In addition, see the rejection above in paragraph 12 for rejection to claim 26.

In the remarks, the applicant argues that:

- 1) Claims 27-32 depend from claim 26 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 26, are neither disclosed nor suggested in the references of record, either singly or in combination with one another.

Examiner's response:

- 1) Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claims 27-32. The combination of Smale and Cheng clearly shows each and every limitation in claims 27-32.

In the remarks, the applicant argues that:

m) Claim 33 recites a method of providing a software extension comprising:

- receiving XML data that pertains to a software extension that is to be added to a software platform;
- processing the XML data to identify XML nodes; and
- exposing an XML list that contains one or more nodes that are identified by said processing.

In making out the rejection of this claim, the Office argues that this claim is simply a method version of the architecture recited in claims 18-19. Accordingly, the Office rejects this claim for the same reasons as claims 18-19 were rejected. Applicant disagrees with the Office and submits that this claim is not simply a method version of claims 18-19. Specifically, this claim recites features which are different from those recited in claims 18-19. Applicant submits that this claim has not been examined by the Office because the cited art has not been applied to this claim.

Assuming, however, that the Office had specifically applied the art to this claim, it is evident, in light of the discussion above, that neither Smale nor Cheng, individually or in combination with one another, disclose or suggest the subject matter of this claim. Specifically, neither Smale nor Cheng disclose or suggest a method that "receives XML data that pertains to a

software extension that is to be added to a software platform." Accordingly, for at least this reason, this claim is allowable.

Examiner's response:

m) Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claim 33. The combination of Smale and Cheng clearly shows each and every limitation in claim 33. The combination of Smale and Cheng teaches receiving XML data that pertains to a software extension that is to be added to a software platform (Smale, column 7, lines 16-27 and Cheng, column 15, lines 31-56; Cheng is relied upon for the claimed limitation reciting "XML data"). Furthermore, the Examiner has already addressed the applicant's arguments regarding receiving data in the Examiner's Response (f) above. In addition, see the rejection above in paragraph 12 for rejection to claim 33.

In the remarks, the applicant argues that:

n) Claims 34-39 depend from claim 33 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 33, are neither disclosed nor suggested in the references of record, either singly or in combination with one another.

Examiner's response:

n) Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claims 34-39. The combination of Smale and Cheng clearly shows each and every limitation in claims 34-39.

In the remarks, the applicant argues that:

- o) Claim 40 recites a method of providing a software extension comprising:
- receiving multiple different files, each of which being associated with a different software extension and logically describing its associated software extension;
 - combining the multiple different files in a single list;
 - exposing portions of the list;
 - processing exposed portions of the list to identify one or more feature types that are to be added to a software platform; and
 - notifying an extension manager that is associated with a particular feature type.

In making out the rejection of this claim, the Office argues that this claim is a method version of the architecture recited in claim 18. Applicant respectfully disagrees. Specifically, this claim recites features which are different from those recited in claim 18. Applicant submits that this claim has not been examined by the Office because the cited art has not been applied to this claim.

Assuming, however, that the Office had specifically applied the art to this claim, it is evident, in light of the discussion above, that neither Smale nor Cheng, individually or in combination with one another, disclose or suggest the subject matter of this claim. Specifically,

neither. Smale nor Cheng disclose or suggest a to method that "receives multiple different files, each of which being associated with a different software extension and logically describing its associated software extension." Accordingly, for at least this reason, this claim is allowable.

Examiner's response:

- o) Examiner strongly disagrees with applicant's assertion that Smale fails to disclose the claimed limitations recited in claim 40. Smale clearly shows each and every limitation in claim 40. Smale teaches receives multiple different files, each of which being associated with a different software extension and logically describing its associated software extension (column 7, lines 16-27). Furthermore, the Examiner has already addressed the applicant's arguments regarding receiving data in the Examiner's Response (f) above. In addition, see the rejection above in paragraph 10 for rejection to claim 40.

In the remarks, the applicant argues that:

- p) Claims 41-42 depend from claim 40 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 40, are neither disclosed nor suggested in the references of record, either singly or in combination with one another.

Examiner's response:

- p) Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claim 41 or that Smale fails to disclose

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the claimed limitations recited in claim 42. The combination of Smale and Cheng clearly shows each and every limitation in claim 41 and Smale clearly shows each and every limitation in claim 42.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication from the examiner should be directed to Qamrun Nahar whose telephone number is (703) 305-7699. The examiner can normally be reached on Mondays through Thursdays from 9:00 AM to 6:30 PM. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone number for the organization where this application or processing is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

QN
August 10, 2003

Kakali Chaki
KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100